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# **FORM**

(To be used for all correspondence after initial filing)

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Application Number	10/618,076				
Filing Date	July 11, 2003				
First Named Inventor	Ryo Kubota				
Group Art Unit					
Examiner Name					
Attorney Docket No.	100118.401				

		Attorney Docket No.	100118.401					
Fee Transmitta Fee Attacl Amendment/R After Final Affidavits/c Extension of T Express Abanc Request Information Dis Statement; For Cited Reference Certified Copy Document(s) Response to M under 37 C.F.F. Response to M Parts/Incomple	al Form hed esponse declaration(s) ime Request donment sclosure rm PTO-1449 ces (29) of Priority dissing Parts R. 1.52 or 1.53 dissing	Drawing(s)  Request for Corrected Filing Receipt Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation, Change of Correspondence Address Declaration Statement under 37 CFR 3.73(b) Terminal Disclaimer Request for Refund	CD(s), Number of CD(s)  After Allowance Communication to Group  Appeal Communication to Board of Appeals and Interferences  Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  Proprietary Information  Status Letter  Return Receipt Postcard  Additional Enclosure(s) (please identify below):					
Remarks		<u> </u>						
Individual Name	Mae Joanne Reg. No. 48,		OR AGENT  Customer Number  00500					
Signature	macs	Joanne Rosak						
Date November 1								
CERTIFICATE OF MAILING  I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date specified below.								
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Signature		A	Date: November 17, 2003					

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**PATENT** 

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November 17, 2003

Date

Jason Añover

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Applicants** 

Ryo Kubota et al.

Application No.

10/618,076

Filed

July 11, 2003

For

METHODS AND SYSTEMS FOR EXTENDED IN VITRO

**CULTURE OF NEURONAL CELLS** 

Docket No.

: 100118.401

Date

: November 17, 2003

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# **INFORMATION DISCLOSURE STATEMENT**

#### Commissioner for Patents:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicants wish to make known to the U.S. Patent and Trademark Office the references set forth on the attached form PTO-1449. Applicants note that since the application filing date is after June 30, 2003, copies of the cited U.S. patents and published patent applications are not required and accordingly have not been provided. Copies of all other cited references are enclosed. As to any reference cited, applicants do not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserve the right to traverse or antedate any such reference, as by a showing under 37 C.F.R. § 1.131 or other method. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicants' duty to disclose all information they are

aware of which is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Applicants believe this Information Disclosure Statement has been timely filed, however, the Director is authorized to charge any fee due by way of this Information Disclosure Statement to our Deposit Account No. 19-1090.

Respectfully submitted,

Seed Intellectual Property Law Group PLLC

Mac Donne Rosole

Mae Joanne Rosok

Registration No. 48,903

**Enclosures:** 

Postcard Form PTO-1449 Cited References (29)

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U.S. DEPARTMENT OF COMMERCE
(PEVY-80)
PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE STATEMENT
(Use several sheets if necessary)

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ATTY. DOCKET NO.	APPLICATION NO.	
100118.401	10/618,076	
APPLICANTS		
Ryo Kubota et al.		
FILING DATE	GROUP ART UNIT	
July 11, 2003		

#### **U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL	I INTERNITATION IN TAIL		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATI
			Louis	514	12		
	AB	5,840,686	11/24/98	Chader et al.	514	12	
	AC	5,851,832	12/22/98	Weiss et al.	435	368	
	AD	6,117,675	09/12/00	van der Kooy et al.	435	354	
	AE	6,379,882	04/30/02	Bitler et al.	435	4	
-	AF	6,517,833	02/11/03	Edge	424	93.7	
	AG	2002/0009713	01/24/02	Miller et al.	435	4	

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	TRANS	LATION
	DOCOMENT NOMBER	DATE	COUNTRY	YES	NO
AH	WO 98/12303	03/26/98	WIPO		
AI	WO 99/29279	06/17/99	WIPO		
AJ	WO 00/47238	08/17/00	WIPO		
AK	WO 01/42784 A2	06/14/01	WIPO		
AL	2001-255318	09/21/01	JP (+ Abstract in English)		
AM	WO 01/83714 A2	11/08/01	WIPO		

### OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

,	AN	Aramant, R. et al., "Transplantation of Human Embryonic Retina to Adult Rat Retina," Restor. Neurol. Nerutrosci. 2(1):9-22, October 1990.
	AO	Dentchev, T. et al., "Amyloid-ß is Found in Drusen from Some Age-Related Macular Degeneration Retinas, but not in Drusen from Normal Retinas," <i>Molecular Vision 9</i> :184-190, March 2003
	AP	Fischer, A et al., "Identification of a Proliferating Marginal Zone of Retinal Progenitors in Postnatal Chickens," <i>Develop. Biol. 220</i> (2):197-200, April 2000.
	AQ	Fintz, A-C. et al., "Partial characterization of retina-derived cone neuroprotection in two culture models of photoreceptor degeneration," <i>Invest. Ophthal. &amp; Vis. Sci. 44</i> (2):818-825, February 2003

**EXAMINER** 

DATE CONSIDERED

<sup>\*</sup> EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

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FORM PTO-144 (REV.7-30)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			ATTY. DOCKET NO. APPLICATION NO. 100118.401 10/618,076							
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	-		ОТНЕ	ER PRIOR A	RT (Includin	g Author, Title, Date, Pertinen	t Pages, Etc.)				
	ВВ		Gage, F. et a Rev. Neurosc			rization, and Use of S	Stem Cells 1	From the Cl	NS," Annu.		
	вс					generation of Adult F Ophthal. & Vis. Sci.			malian		
• , ,	Heidinger, V. et al., "Ability of Retinal Müller Glial Cells to Excitotoxicityt in Vitro Depends Upon Maturation and Neu 25:229-239, 1999.							Protect Neurons Against			
	BE		Hicks D. et a Research 64.			neration of Adult Hu 1994.	man Photor	eceptors in	Vitro," <i>Brain</i>		
	BF	Johnson, L. et al., "The Alzheimer's Aß-Peptide is Deposited at Sites of Complem Activation in Pathologic Deposits Associated with Aging and Age-Related Macula Degeneration," <i>Proc. Natl. Acad. Sci. USA 99</i> (18):11830-11835, September 2002.							cular		
	Luo, X. et al., "Selective Excitotoxic Degeneration of Adult Pig Retinal Ganglion Ce Vitro," <i>Invest. Ophthal. &amp; Vis. Sci.</i> 42(5):1096-1106, April 2001.										
÷	вн	Ogilvie I et al "Growth Factors in Combination, but Not Individually Decaye rd N									
	BI		<ul> <li>Picaud, S. et al., "Adult Human Retinal Neurons in Culture: Physiology of Horizontal Cells Invest. Ophthal. &amp; Vis. Sci. 39(13):2637-2648, December 1998.</li> <li>Santos, R. et al., "Cyclic AMP Increases the Survival of Ganglion Cell in Mixed Retinal Cell Cultures in the Absence of Exogenous Neutrophic Molecules, an Effect that Involves Cholinergic Activity," Braz. J. Med. Biol. Res. 34(12):1585-1593, 2001.</li> </ul>						izontal Cells'		
	ВЈ										
	вк					Fetal Retina Transpla ci. 39(11):2121-2131		_	ged Rat		
	BL		Giasson, B. e	et al., "The R Alzheimer'	Relationshi s and Park	p Between Oxidative inson's Disease," Fro	/Nitrative S	tress and Pa			
	Tropepe, V. et al., "Retinal Stem Cells in the Adult Mammalian Eye," Science 17:2032 2036, March 2000.							17:2032-			

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to applicant(s). C:\NrPortb\\implimanage\JASONA\430257\_1.DOC

**EXAMINER** 

Date: 11/17/03